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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,469	04/30/2001	Dejan S. Milojevic	10003509-1	3049

7590 01/30/2004  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

IQBAL, NADEEM

ART UNIT	PAPER NUMBER
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2114

DATE MAILED: 01/30/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/845,469

**Applicant(s)**

MILOJICIC ET AL.

**Examiner**

Nadeem Iqbal

**Art Unit**

2114

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 is/are allowed.
- 6) ☒ Claim(s) 1,2,5-8,10,11,14-16 and 19 is/are rejected.
- 7) ☒ Claim(s) 3,4,12,13,17 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 2, 5-8, 10, 11, 14-16, & 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vivio et al., (U.S. Patent number 5867642) in view of Hashiguchi et al., (U.S. Patent number 5261084).

4. As per claim 1, Vivio et al., (Vivio) teaches (col. 2, lines 60-63) a system management controller that logs memory errors detected by an error detection and correction memory system. He thus teaches limitations pertain to identifying a predetermined instruction sequence, monitoring for memory access errors and logging errors. He does not explicitly disclose raising exceptions if the memory access error is logged. Hashiguchi et al., teaches (col. 2, lines 27-29) that when the data memory access error is detected, exceptional processing is automatically

Art Unit: 2114

executed. A person of ordinary skill in the art at the time the invention was made would have been motivated to include to perform raising exceptions when memory access error is logged into the invention of Vivio from the invention of Hashiguchi since Vivio teaches to log non-fatal memory errors and clearly would have been desirable to perform exceptional processing for other types of errors, thus providing motivation for a person of ordinary skill in the art for the stated inclusion.

5. As per claim 2, Vivio teaches (col. 2, lines 52-54) a system that dynamically remaps data from a potentially faulty memory area to reserve memory area while maintaining memory coherency. He thus teaches to provide checkpointing a set of system data and recovering from the memory access error.

***Allowable Subject Matter***

6. Claim 9 is allowed.

7. Claims 3, 4, 12, 13, 17 & 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. As per claims 5 & 6, He also teaches (col. 2, lines 57-59) that his invention avoids errors fro devices and applications that can not tolerate long delays in accessing memory, thus providing masking a machine check abort handle.

9. As per claim 7, Vivio already teaches (col. 2, lines 60-63) a system management controller that logs memory errors detected by an error detection and correction memory system, He thus would also update pointers.

Art Unit: 2114

10. As per claim 8, Vivio teaches (col. 2, lines 55-57) to perform remapping of memory without denying accesses to memory or interrupting applications for relatively long periods of time, thus would allow re-executing the memory access request.

11. As per claims 10 & 15, Vivio substantially teaches the claimed invention as disclosed related to claim 1 above. He also teaches a system controller that logs memory errors detected by an error detection and correction memory system. He thus teaches limitations pertain to identifying a predetermined instruction sequence, monitoring for memory access errors and logging errors. He does not explicitly disclose raising exceptions if the memory access error is logged. Hashiguchi et al., teaches (col. 2, lines 27-29) that when the data memory access error is detected, exceptional processing is automatically executed. A person of ordinary skill in the art would have been motivated to include to perform raising exceptions when memory access error is logged into the invention of Vivio from the invention of Hashiguchi since Vivio teaches to log non-fatal memory errors and clearly would have been desirable to perform exceptional processing for other types of errors, thus providing motivation for a person of ordinary skill in the art for the stated inclusion.

12. As per claims 11 & 16, Vivio teaches (col. 2, lines 52-54) a system that dynamically remaps data from a potentially faulty memory area to reserve memory area while maintaining memory coherency. He thus teaches to provide checkpointing a set of system data and recovering from the memory access error.

13. As per claim 19, He also teaches (col. 2, lines 57-59) that his invention avoids errors from devices and applications that can not tolerate long delays in accessing memory, thus providing masking a machine check abort handle.

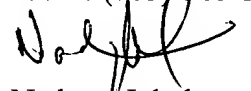
Art Unit: 2114

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nadeem Iqbal whose telephone number is (703)-308-5228. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W Beausoliel can be reached on (703)-305-9713. The fax phone number for the organization where this application or proceeding is assigned is (703)-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-305-3900.

  
Nadeem Iqbal  
Primary Examiner  
Art Unit 2114

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